

**WHAT IS CLAIMED IS:**

1. A distance measuring device comprising:  
a distance measuring sensor for measuring a  
plurality of regions of an object region and outputting  
5 measurement data;

a detector for detecting an unmeasurable region  
within the plurality of measurement regions based on the  
measurement data output from said distance measuring  
sensor;

10 a calculator for calculating a spacing on the  
object corresponding to the unmeasurable region detected  
by said detector; and

a creator for creating distance data of the  
unmeasurable region based on the distance data of the  
15 measurable region among the plurality of distance  
measuring regions and the spacing calculated by said  
calculator.

2. A distance measuring device according to  
20 claim 1, wherein said detector detects the unmeasurable  
region by determining a reliability of the distance data  
output from the distance measuring sensor.

3. A distance measuring device according to  
25 claim 1, said creator creates the distance data of the

unmeasurable region based on the distance data of the measurable regions adjacent to the unmeasurable region.

4. A distance measuring device according to claim 3, said creator creates the distance data of the unmeasurable region based on a distance difference of the measurable regions adjacent to both sides of the unmeasurable region.

5. A distance measuring device according to claim 4, said creator determines whether or not the distance data of the unmeasurable region is created by comparing the distance difference of the measurable regions to a specific value.

6. A distance measuring device according to claim 1, said creator determines whether or not the distance data of the unmeasurable region is created by comparing the spacing of the unmeasurable region calculated by said calculator to a specific value.

7. A distance measuring device according to claim 1, further comprises a luminance calculator for calculating a luminance of the distance measuring regions, and wherein said creator determines whether or not the

distance data of the unmeasurable region is created in accordance with the difference in the luminance of the unmeasurable region and the luminance of the measurable regions.

5

8. A distance measuring device according to claim 1, further comprises a region selector for selecting the distance measuring regions including at least three or more measuring points from among a plurality of measuring points, and wherein said detector for detecting an unmeasurable region within the selected measuring regions.

10

15

9. A camera provided with a distance measuring device comprising:

a distance measuring sensor for measuring a plurality of regions of an object region and outputting measurement data;

20

a detector for detecting an unmeasurable region within the plurality of measurement regions based on the measurement data output from said distance measuring sensor;

25

a calculator for calculating a spacing on the object corresponding to the unmeasurable region detected by said detector;

a creator for creating distance data of the unmeasurable region based on the distance data of the measurable region among the plurality of distance measuring regions and the spacing calculated by said calculator;

a finder for viewing the object region;

a display for displaying a range corresponding to each distance measuring region within the view of the finder; and

a controller for recognizing a photographic object corresponding to the distance data of the measurable region and the created distance data of the unmeasurable region and for controlling display on said display in accordance with the recognition result.

10. A camera provided with a distance measuring device comprising:

a distance measuring sensor for measuring a plurality of regions of an object region and outputting measurement data;

a detector for detecting an unmeasurable region within the plurality of measurement regions based on the measurement data output from said distance measuring sensor;

a calculator for calculating a spacing on the object corresponding to the unmeasurable region detected by said detector;

5 a creator for creating distance data of the unmeasurable region based on the distance data of the measurable region among the plurality of distance measuring regions and the spacing calculated by said calculator;

10 a focus adjuster for adjusting the focus of a photographic lens; and

15 a controller for recognizing a photographic object corresponding to the distance data of the measurable region and the created distance data of the unmeasurable region and for controlling said focus adjuster in accordance with the recognition result.

09753002-010204  
"2019" 2005/5/10